

Amendments to the Specification:

Please replace paragraph [0010] with the following amended paragraph:

[0010] Specifically, as shown in **Fig. 4**, in a case in which a signal I_S for switching the on/off condition of an arbitrary pair of switching elements is sent from drive unit 4 to inverter 2, an upper switching element USE is switched from ON to OFF at a time later than a time at which the signal is switched from a high level to a low level, a lower switching element LSE is switched from a low level to a high level at a time later than the above-described time, and as a result of this switching operation, the power source current I_{dc} varies. Further, because the measurement signal of DC current sensor 6, which comprises a resistance and the like, is output to control unit 5 after being A/D converted by A/D converter 7, a time delay occurs in obtaining the A/D converted output (shown as “A/D” in **Fig. 4**) and accompanies the variation of the power source current I_{dc} . Because the time t_d shown in **Fig. 4** becomes about ~~on~~ one and one half micro (1.5μ) seconds in the situation in which a general insulated, gate bipolar transistor (IGBT) element is used as a switching element, a time interval of at least about t_d is required between measurement times t_1 and t_2 in order to accurately measure the power source current I_{dc} at measurement time t_1 . Therefore, when the time difference between measurement times t_1 and t_2 are less than the time t_d shown in **Fig. 4**, even if the power source current I_{dc} is measured at measurement time t_1 , the measured value may include an error.

Please replace paragraph [0049] with the following amended paragraph:

[0049] On the other hand, as with respective phase currents I_u , I_v , and I_w shown in the lower portion of **Fig. 6**, when the respective phase currents I_u , I_v , and I_w vary in one or a plurality of continuous periods of reference chopping wave BTW, although the above-described estimations may be possible, the following method may obtain a more accurate value. For example, W-phase current $I_w(T2)$ at measurement time $T2$ is estimated by the equation: $I_w(T2)=(I_w(T1)+I_w(T3))/2$ from W-phase current $I_w(T1)$ measured at measurement time $T1$ and W-phase current $I_w(T3)$ measured at measurement time $T3$, W-phase current $I_w(T4)$ at measurement time $T4$ is estimated by the equation: $I_w(T4)=(I_w(T3)+I_w(T5))/2$ from W-phase current $I_w(T3)$ measured at measurement time $T3$ and W-phase current $I_w(T5)$ measured at

measurement time T5, and W-phase current $I_w(T3)$ at measurement time T3 is estimated by the equation: ~~ef~~ $I_w(T3) = (I_w(T2) + I_w(T4))/2$ based on estimated, W-phase current $I_w(T2)$ at measurement time T2 and estimated W-phase current $I_w(T4)$ at measurement time T4.

Please replace paragraph [0051] with the following amended paragraph:

[0051] Therefore, if power source current I_{dc} is measured at three measurement times T1, T2, and T3, because W-phase current I_w may be measured at measurement time T1, V-phase current I_v may be measured at measurement time T2 and U-phase current I_u may be measured at measurement time T3, respectively, respective phase currents I_u , I_v , and I_w at a time, determined by treating the measurement times T1, T2 and T3 as identical, may be detected without calculation. Of course, a phase current, which may not be ~~measure~~ measured at another measurement time, may be measured by inverting at least one phase output at the measurement time.